REMARKS

This Amendment is in response to the Office Action mailed on 6 August 2001, in which claims 1, 5, 6, 8 - 13, 16 - 24, 26 - 31, 33 - 38, and 40 - 43 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,945,920 to Clossick; claims 2 - 4, 7, 14, 15, 25, 32, 38, 39, and 44 were objected to as being dependent on a rejected base claim, but containing allowable subject matter; and claims 45 - 52 were indicated as allowable.

With this reply, claims 1, 13, 22, 29, 35 and 40 are amended, and claims 53 - 89 are added. The claims as amended are set forth in the Appendix. Amended claim 1 corresponds to claim 2, newly added claim 53 corresponds to claim 3, newly added claim 64 corresponds to claim 7, amended claim 13 corresponds to claim 14, amended claim 22 corresponds to claim 25, amended claim 29 corresponds to claim 32, amended claim 35 corresponds to claim 38, newly added claim 75 corresponds to claim 39, and amended claim 40 corresponds to claim 44. Newly added dependent claims 54 - 63 depend from claim 53; newly added claims 65 - 74 depend from claim 64; and newly added claims 76 - 78 depend from claim 75. Thus, in accordance with the Office Action of 6 August 2001, pending claims 1, 3 - 13, 15 - 24, 26 - 31, 33 - 37, 39 - 43, and 45 - 78 are in condition for allowance.

In addition, newly added claim 79 corresponds to rejected dependent claim 5. Claim 5 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,945,920 to Clossick ("*Clossick*"). *Clossick* does not disclose, teach or suggest the malleable shaft handle of newly added claim 79. Claim 79 includes a first tube has a wall thickness and an outer radius extending from the longitudinal axis of the first tube to an outer surface of the first tube, where the ratio of the wall thickness to the square of the outer radius approximately ranges between about 2.0 and about 6.0. *Clossick* discloses a biopsy forceps including a multi-piece torqueable and formable body assembly or shaft. The body assembly includes a coil spring guidewire, a first sleeve and a second sleeve. The first sleeve, also referred to as the torqueable tubing, is preferably formed by three layers of tubing, an inner plastic extrusion, a tubular envelope of braided material and an outer plastic extrusion.

Thus, it is respectfully not understood where a fair reading of the teachings of *Clossick* define a first tube has a wall thickness and an outer radius extending from the longitudinal axis

of the first tube to an outer surface of the first tube, where the ratio of the wall thickness to the square of the outer radius approximately ranges between about 2.0 and about 6.0. For this reason alone, claim 79 should be allowed. Likewise, because newly added dependent claims 80 – 89 include at least this same language, claims 80 – 89 should be allowed.

VI. CONCLUSION

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration under 37 C.F.R. § 1.112 of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

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By _____

Paul E. Schaafsma
Registration No. 32,664
Attorney for Applicant

FOLEY & LARDNER
One IBM Plaza
330 North Wabash
Suite 3300
Chicago, Illinois 60611
Telephone: 312.755.2610
Facsimile: 312.297.1925

APPENDIX

1. (Once Amended) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

a first tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the first tube coupled to the handle assembly, the distal end of the first tube coupled to the tissue engaging means, the actuating means extending axially through the first tube, the first tube configured to be kink resistant, fatigue resistant, and to bend about some bending radius in response to a bending moment applied to the first tube, the bending moment applied to the first tube ranging between about 6 in-lbs to 27 in-lbs.

13. (Once Amended) A surgical device comprising:

a tissue engaging means;

a handle assembly;

an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means; and

a shaft member made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the shaft member coupled to the handle assembly, the distal end of the shaft member coupled to the tissue engaging means, the actuating means extending axially through the shaft member, the shaft member configured to be kink resistant, fatigue resistant, and to bend about some bending radius in response to a bending moment applied to the shaft member, the bending moment applied to the shaft member ranging between 6 in-lbs to 27 in-lbs.

22. (Once Amended) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

a tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the tube coupled to the handle assembly, the distal end of the tube coupled to the tissue engaging means, the tube configured to be kink resistant, fatigue resistant; and

at least two springs axially aligned and extending from the proximal end of the tube to the distal end of the tube [one spring disposed within the tube], the actuating means extending axially through the [spring and the] tube for inhibiting the collapse of the tube.

29. (Once Amended) A surgical device comprising:

a tissue engaging means;

a handle assembly;

an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means; and

a shaft member including:

a tube made of a malleable material selected from the group consisting of stainless steel, copper, aluminum and brass, and having a proximal end, a distal end and a longitudinal axis, the proximal end of the tube coupled to the handle assembly, the distal end of the tube coupled to the tissue engaging means, the tube configured to be kink resistant, fatigue resistant; and

at least one spring disposed within the tube, the actuating means extending axially through the spring and the tube.

35. (Once Amended) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

an outer tube having a proximal end, a distal end and a longitudinal axis; and

a inner tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the inner tube coupled to the handle assembly, the distal end of the inner tube coupled to the tissue engaging means, the actuating means extending axially through the inner tube, the inner tube coaxially

aligned and disposed within the outer tube, the inner tube configured to be kink resistant, fatigue resistant, and to bend about a bending radius in response to a bending moment applied to the inner tube;

wherein the distal end of at least one of the inner tube and the outer tube is removably coupled to the tissue engaging means.

40. (Once Amended) A surgical device comprising:

a tissue engaging means;

a handle assembly;

an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means;

a shaft member made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the shaft member coupled to the handle assembly, the distal end of the shaft member coupled to the tissue engaging means, the actuating means extending axially through the shaft member, the shaft member configured to be kink resistant, fatigue resistant, and to bend about a bending radius in response to a bending moment applied to the shaft member; and

an outer tube having a proximal end, a distal end and a longitudinal axis, the shaft member and the outer tube being formed as a co-extrusion, the outer tube coaxially aligned with the shaft member, the shaft member disposed within the outer tube.

53. (Newly Added) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

a first tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the first tube coupled to the handle assembly, the distal end of the first tube coupled to the tissue engaging means, the actuating means extending axially through the first tube, the first tube configured to be kink resistant, fatigue resistant, and to bend about some bending radius in response to a

bending moment applied to the first tube, the minimum bending radius of the first tube ranging from about ¼ inch to 3/8 inch.

54. (Newly Added) The shaft member of claim 53 wherein the bending moment applied to the first tube ranges between about 6 in-lbs to 27 in-lbs.

55. (Newly Added) The shaft member of claim 53 wherein the bending moment applied to the first tube ranges between about 12 in-lbs to 15 in-lbs.

56. (Newly Added) The shaft member of claim 53, wherein the first tube has a wall thickness and an outer radius extending from the longitudinal axis of the first tube to an outer surface of the first tube, and wherein a ratio of the wall thickness to the square of the outer radius approximately ranges between about 2.0 and about 6.0.

57. (Newly Added) The shaft member of claim 53, wherein the first tube is made of a material selected from the group consisting of stainless steel, copper, aluminum and brass.

58. (Newly Added) The shaft member of claim 53, wherein the tube has a wall thickness ranging approximately between 0.008 inches and 0.050 inches and an outside diameter ranging approximately between 0.094 inches to 0.125 inches.

59. (Newly Added) The shaft member of claim 53, wherein the proximal end of the first tube is removably coupled to the handle assembly.

60. (Newly Added) The shaft member of claim 53, wherein the distal end of the first tube is removably coupled to the tissue engaging means.

61. (Newly Added) The shaft member of claim 53, further comprising a second tube, the first tube coaxially aligned and disposed within the second tube.

62. (Newly Added) The shaft member of claim 61, wherein the second tube is made of a material selected from the group consisting of aluminum, brass, copper and plastic.

63. (Newly Added) The shaft member of claim 61, wherein the first tube and the second tube are formed as a co-extrusion.

64. (Newly Added) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

a first tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the proximal end of the first tube coupled to the handle assembly, the distal end of the first tube coupled to the tissue engaging means, the actuating means extending axially through the first tube, the first tube configured to be kink resistant, fatigue resistant, and to bend about some bending radius in response to a bending moment applied to the first tube, the tube having a wall thickness ranging approximately between 0.008 inches and 0.050 inches and an outside diameter ranging approximately between 0.094 inches to 0.125 inches.

65. (Newly Added) The shaft member of claim 64 wherein the bending moment applied to the first tube ranges between about 6 in-lbs to 27 in-lbs.

66. (Newly Added) The shaft member of claim 64 wherein the bending moment applied to the first tube ranges between about 12 in-lbs to 15 in-lbs.

67. (Newly Added) The shaft member of claim 64, wherein the minimum bending radius of the first tube ranges from about ¼ inch to 3/8 inch.

68. (Newly Added) The shaft member of claim 64, wherein the first tube has a wall thickness and an outer radius extending from the longitudinal axis of the first tube to an outer surface of the first tube, and wherein a ratio of the wall thickness to the square of the outer radius approximately ranges between about 2.0 and about 6.0.

69. (Newly Added) The shaft member of claim 64, wherein the first tube is made of a material selected from the group consisting of stainless steel, copper, aluminum and brass.

70. (Newly Added) The shaft member of claim 64, wherein the proximal end of the first tube is removably coupled to the handle assembly.

71. (Newly Added) The shaft member of claim 64, wherein the distal end of the first tube is removably coupled to the tissue engaging means.

72. (Newly Added) The shaft member of claim 64, further comprising a second tube, the first tube coaxially aligned and disposed within the second tube.

73. (Newly Added) The shaft member of claim 72, wherein the second tube is made of a material selected from the group consisting of aluminum, brass, copper and plastic.

74. (Newly Added) The shaft member of claim 72, wherein the first tube and the second tube are formed as a co-extrusion.

75. (Newly Added) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

an outer tube having a proximal end, a distal end and a longitudinal axis;

an inner tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the inner tube and the outer tube formed as a co-extrusion; and

the proximal end of the inner tube coupled to the handle assembly, the distal end of the inner tube coupled to the tissue engaging means, the actuating means extending axially through the inner tube, the inner tube coaxially aligned and disposed within the outer tube, the inner tube configured to be kink resistant, fatigue resistant, and to bend about a bending radius in response to a bending moment applied to the inner tube.

76. (Newly Added) The shaft member of claim 75, wherein the outer tube is made of a material selected from the group consisting of aluminum, brass, copper and plastic, and wherein the inner tube is made of a material selected from the group consisting of stainless steel, copper, aluminum and brass.

77. (Newly Added) The shaft member of claim 75, wherein the proximal end of at least one of the inner tube and the outer tube is removably coupled to the handle assembly.

78. (Newly Added) The shaft member of claim 75, wherein the distal end of at least one of the inner tube and the outer tube is removably coupled to the tissue engaging means.

79. (Newly Added) A malleable shaft member for a surgical device having a tissue engaging means and a handle assembly, and an actuating means connecting the handle assembly and the tissue engaging means for actuating the tissue engaging means, the shaft member comprising:

a first tube made of a malleable material and having a proximal end, a distal end and a longitudinal axis, the first tube has a wall thickness and an outer radius extending from the longitudinal axis of the first tube to an outer surface of the first tube, and wherein a ratio of the wall thickness to the square of the outer radius approximately ranges between about 2.0 and about 6.0, the proximal end of the first tube coupled to the handle assembly, the distal end of the first tube coupled to the tissue engaging means, the actuating means extending axially through the first tube, the first tube configured to be kink resistant, fatigue resistant, and to bend about some bending radius in response to a bending moment applied to the first tube.

80. (Newly Added) The shaft member of claim 79 wherein the bending moment applied to the first tube ranges between about 6 in-lbs to 27 in-lbs.

81. (Newly Added) The shaft member of claim 79 wherein the bending moment applied to the first tube ranges between about 12 in-lbs to 15 in-lbs.

82. (Newly Added) The shaft member of claim 79, wherein the minimum bending radius of the first tube ranges from about ¼ inch to 3/8 inch.

83. (Newly Added) The shaft member of claim 79, wherein the first tube is made of a material selected from the group consisting of stainless steel, copper, aluminum and brass.

84. (Newly Added) The shaft member of claim 79, wherein the tube has a wall thickness ranging approximately between 0.008 inches and 0.050 inches and an outside diameter ranging approximately between 0.094 inches to 0.125 inches.

85. (Newly Added) The shaft member of claim 79, wherein the proximal end of the first tube is removably coupled to the handle assembly.

86. (Newly Added) The shaft member of claim 79, wherein the distal end of the first tube is removably coupled to the tissue engaging means.

87. (Newly Added) The shaft member of claim 79, further comprising a second tube, the first tube coaxially aligned and disposed within the second tube.

88. (Newly Added) The shaft member of claim 87, wherein the second tube is made of a material selected from the group consisting of aluminum, brass, copper and plastic.

89. (Newly Added) The shaft member of claim 87, wherein the first tube and the second tube are formed as a co-extrusion.